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**BOARD OF ENVIRONMENTAL REVIEW
OF THE STATE OF MONTANA**

Minutes of Public Hearings/Meetings on September 26, 2002, in Miles City and on September 27, 2002, in Helena, to consider the proposed adoption and amendment of rules pertaining to standards for SAR and EC, etc.

Call to Order

Chairman Russell called the public hearing to order at 9:40 a.m., on Thursday, September 26, 2002, in the auditorium of the VA Hospital, 210 South Winchester, Miles City, Montana.

Attendance

Board Members Present: Chairman Joseph Russell, David Fishbaugh, Garon Smith (until about 3 p.m.), Kim Lacey, and Russ Hudson

Board Members Absent: Ward Shanahan, Susan Kirby Brooke

Board Attorney Present: Thomas G. Bowe, Assistant Attorney General, Agency Legal Services Bureau

Board Secretary Present: Joyce Wittenberg

Court Reporter Present: Carol Hendrickson

Department Personnel Present: Jan Sensibaugh, Director; Tom Livers, Deputy Director; John North, Chief Legal Counsel; and Abe Horpestad, Resource Protection Bureau (RPB), Planning, Prevention and Assistance Division (PPAD)

Interested Persons Present: See attached sign-in sheets

Introduction by Chairman Russell

Chairman Russell stated that the purpose of the hearing was to give interested persons the opportunity to present their views to the Board of Environmental Review about proposals to adopt rules pertaining to numeric water quality standards for electrical conductivity and sodium adsorption ratio. He said that the Board Attorney, Tom Bowe, would read certain notices and provide information about the procedure for the hearing.

Introduction by Assistant Attorney General Tom Bowe

Tom Bowe announced that copies of the proposed rulemaking are available at the entrance in the back of the room. He asked

anyone wishing to make a statement to fill out a form entitled "Notice to Board of Environmental Review." These forms were also available in the back of the room.

Mr. Bowe read the Notice of Function of Administrative Rule Review Committee as required by Mont. Code Ann. § 2-4-302(7)(a), and informed the persons at the hearing of the rulemaking interested persons list and of the opportunity to have their names placed on that list, as provided by Mont. Code Ann. § 2-4-302(2)(a).

Mr. Bowe stated that notice of the hearing was contained in 2002 Montana Administrative Register, Issue No. 16, published on August 29, 2002. The notices of the proposed rulemaking are the following:

Notice Number 17-170, at pages 2262 to 2268;

Notice Number 17-171 at pages 2269 to 2279; and

Notice Number 17-172 at pages 2280 to 2293.

Mr. Bowe explained that after publication, the location was changed from the Community College to the VA Hospital. He described various ways the correct location was publicized, such as in mailings to persons who receive agendas of Board meetings, posting on the websites of the Board and of the Department of Environmental Quality, and an article in the local newspaper.

Mr. Bowe announced that persons at the hearing would be given an opportunity to submit their data, views, or arguments concerning the proposed rulemakings, either orally or in writing. He explained how persons could submit written comments after the hearing and announced that written comments should be received by October 3, 2002.

Mr. Bowe summarized the notices. He explained that the Board is considering three alternative rule proposals. In each of the three notices, the proposal is to adopt numeric standards for electrical conductivity (EC) and sodium adsorption ratio (SAR) for the Tongue River, Rosebud Creek, Powder River, and Little Powder River to ensure that designated and existing uses of these waters for agricultural purposes will be protected during the development of coal bed methane (CBM).

Mr. Bowe explained that at present the State does not have numeric standards for EC and SAR. The State does have narrative water quality standards that prohibit substances in water in

concentrations that are harmful to human, animal, plant, or aquatic life.

Notice No. 17-170 was in response to a petition filed by Tongue River Water Users Association, Tongue & Yellowstone Irrigation District, Buffalo Rapids Irrigation Project, and Northern Plains Resource Council (NPRC). This proposal would set different standards for different segments of a stream.

Notices 17-171 and 17-172 were drafted by DEQ. Notice No. 17-171 would set standards that applied to the entire length of a stream. Notice No. 17-172 would set different standards for different segments of the Tongue River, in order to allocate the assimilative capacity of the river.

Each proposal would make the identical amendment of ARM 17.30.602 by adding definitions of electrical conductivity and sodium adsorption ratio.

Both Notices 17-171 and 17-172 propose to make the identical amendment of ARM 17.30.715 pertaining to the criteria for determining non-significant changes in water quality.

Both Notices 17-171 and 17-172 propose new rules creating a water-use classification and standards for coal bed methane water that is held in constructed ponds and reservoirs.

Both Notices 17-171 and 17-172 propose standards and alternative standards. The notices explain that the Board is inviting public comment on the range of values for EC and any alternative formula for SAR. The Board will consider comments and suggestions as to why different EC and SAR values, from those in the proposed rules, should be adopted as the applicable water quality standards.

Mr. Bowe stated that the authority of the Board of Environmental Review to make the proposed rulemakings is contained within Mont. Code Ann. § 75-5-301 and 75-5-303.

Mr. Bowe explained the order of presentation of statements, but stated that the order of presentation would be modified in order to attempt to accommodate the schedules of interested persons who had other commitments.

Statement by Department of Environmental Quality

Abe Horpestad summarized the proposals and submitted two written legal opinions of DEQ counsel providing HB 521 and HB 311 reviews of the proposals. DEQ supports the proposal identified as DEQ 1 or MAR Notice No. 17-171. Instead of adopting standards to allocate assimilative capacity, DEQ favors developing TMDLs to

allocate assimilative capacity. The different proposed standards in different streams take account of different irrigation practices. The proposed standards are naturally exceeded. In the definitions, "total dissolved solids" was changed to "total dissolved salts," but monitoring results are reported as solids, so that term should be used. The formula for SAR on the website was incorrect, but the formula is correct as published.

Statements by Petitioners

Mark Fix stated that the Petitioners have stricter standards above the Tongue River Dam and non-irrigation season standards for EC and SAR. Petitioners support the DEQ standards for tributaries. Allocations of assimilative capacity are fair to users and will prevent Wyoming from using all capacity. Petitioners' standards are instantaneous maxima and DEQ's proposed standards are a 30-day average. Petitioners support instantaneous maxima because such standards better protect irrigators. Petitioners feel that the protections of nondegradation should apply and EC and SAR should be harmful parameters. Petitioners oppose separate standards for ponds. Standards should protect the most vulnerable crops and heavy clay soils. Petitioners specify separate SAR levels, instead of the formula used by DEQ, because of the adverse impact of natural precipitation events on soils irrigated with water high in SAR. The failure to protect the quality of irrigation water would be a taking of the water rights of irrigators.

Jack Tuholske, attorney for Petitioners, explained a disagreement with DEQ's legal analysis of HB 521. First, there is no comparable federal standard. Second, even if HB 521 applies, the Board can make findings to support Petitioners' standards for EC and SAR. In addition, the Board can adopt strict standards at the Wyoming border because EC and SAR increase naturally downstream, and to allow assimilative capacity for CBM development in Montana. Petitioners continue to believe that Board Member Shanahan has a conflict of interest in this matter. The nondegradation process should apply to protect the Montana constitutional right to a clean environment and to ensure better decisions about discharge permits. Mr. Tuholske also submitted a written statement.

Dr. Jim Bauder, Montana State University-Bozeman, stated that numeric standards are measurable, quantifiable, and enforceable. One hundred years of scientific research supports the determination of standards for salinity and sodicity. The effects of excessive salinity and sodicity are well known. Most waters east of the continental divide are impaired by salinity and sodicity. Numeric standards need to set low levels because of high natural accumulations and the concentration effect on the soil water system. Dr. Bauder submitted written materials and a

written statement.

Dr. Larry Munn, University of Wyoming, stated that a large body of science exists on salinity problems in soils. Salinity limits plant production and yield. As salinity increases, growers need more intensive management, which is more expensive. The growing season in eastern Montana and limited availability of water does not allow much flexibility. A forage base of alfalfa is vital to agriculture. The standards proposed by the irrigators are based on science and experience.

Art Hayes, Jr., President, Tongue River Water Users Association, stated that the petition of the irrigators has numerical standards based on science. Water must be used when it is available. There isn't time to test the water for fitness first. Farms and ranches use water efficiently, but this lessens the leaching factor necessary to remove salts from the soil. The gravel banks of the Tongue River and the reservoir above the dam store water, which is a reason low SAR standards are needed in winter months. The reservoir also loses 3000 acre-feet to evaporation, which causes the SAR to increase. Water users have rights to clean water and paid \$5 million as their share of the cost of the dam. Mr. Hayes does not know how much agricultural return flows contribute to SAR on the Tongue River. He submitted a written copy of his testimony and a letter from the Department of Natural Resources and Conservation, Water Resources Division, expressing concern that the proposed maximum SAR value of five was too high and that retention ponds in Wyoming for CBM wastewater were depleting natural inflows to the Tongue River.

David Schwarz, General Manager of the Buffalo Rapids Irrigation Project on the Yellowstone River, is concerned about the cumulative effects of high SAR water on soils irrigated by the project. At present, high SAR water from the Powder River does not mix well in the Yellowstone. Sprinklers are an efficient method to irrigate, but vulnerable to the use of water high in SAR. In response to a question from Board Member Hudson, Mr. Schwarz stated that a mixing structure to reduce the plume of the Powder River was probably not practical because of winter ice. Mr. Schwarz submitted a written statement, including photographs.

Roger Muggli, Tongue & Yellowstone River Irrigation District, explained that since 1886 irrigation water has been the key to agriculture, now supporting 9000 jobs. The expense of CBM development should not be borne by irrigators forced to use poor quality water. In response to a question from Board Member Smith, Mr. Muggli said that there are concerns Montana is not getting the percentage of Tongue River water it should be getting under the Wyoming/Montana Compact.

Statements by Other Persons

Senator Mack Cole lives on an irrigated farm upstream of most proposed CBM development. He is chair of the CBM water and policy committee of the Environmental Quality Council (EQC). The State needs to look at responsible development of CBM resources. The effects of numeric standards should be understood before they are adopted, to be sure that strict standards will not hurt other agricultural users. Meanwhile, look at using TMDLs and narrative standards.

Bill Carrel is the fourth irrigator below the Tongue River Reservoir. He supports the proposed rulemaking. The State needs to look ahead 15 to 20 years and protect agriculture. He also submitted a written statement.

Nancy Carrel stated that her ranch below the Tongue River Dam depends on irrigation water. She supports the irrigators' proposal.

Katherine Lee is from Glendive and is a candidate for the Legislature. She favors responsible development of CBM if standards maintain the historical quality of streams. Ms. Lee submitted a letter from former representative Fred Schepens supporting numeric standards that will not degrade productivity of fields, and a letter from former representative William Day suggesting that CBM discharge water be retained in offstream, lined holding pits, such as used for oil drilling.

Ray Muggli grows alfalfa on irrigated land and manufacturers 3000 tons of alfalfa cubes. The market for such cubes is very large with purchasers as far away as St. Louis, Missouri. He does not oppose CBM development, but supports the irrigators' proposal, so that soil productivity is not reduced.

Steve Muggli is a proponent of the proposed rulemaking. He stated that CBM development should not be allowed to damage agriculture. CBM will be short-lived, and agriculture must be protected for the long-run.

Ben Muggli is a proponent of the proposed rulemaking. He stated that standards should protect future generations.

Luke Muggli is a proponent of the proposed rulemaking. He grows irrigated alfalfa and feels agriculture will be doomed if EC and SAR levels are set too high.

Rex Mongold relocated from Nevada to Montana to grow high value crops, which need high quality water. He also needs high quality forage for the sheep he raises. He supports the proposal of the irrigators. He submitted eight pages of photographs

illustrating the benefits of high quality water.

Bill Tramp teaches earth and life science to seventh and eighth graders in Miles City. He is a proponent of the proposed rulemaking. He was on a field trip to areas of CBM development on the Tongue River. CBM water affects vegetation and killed sagebrush in Wyoming. He is also worried about CBM development de-watering natural springs and wells.

Joe Walks Along, Jr. is the Water Quality Coordinator for the Northern Cheyenne Tribe, which favors setting numeric standards for EC and SAR. The Tribe drafted standards in February 2002, which EPA has reviewed and which are under comment. The Tribe proposes to set standards by reaches and seasons. The Reservation is affected by Rosebud Creek and the Tongue River.

Ron Arneson is an attorney for the Northern Cheyenne Tribe. The Tribe is not opposed to CBM development, but feels the costs of maintaining the environment have to be borne by the CBM industry, which should not be allowed to degrade water quality.

Jon Fogarty, Montana Wildlife Federation, supports the proposal of the irrigators and favors protection of fish and wildlife.

Clint McRae is president of Rosebud Protective Association. He has a ranch on the Rosebud and Tongue. He supports the proposal of the irrigators. Narrative standards are similar to the reasonable and prudent speed limit--too vague for effective enforcement. Agriculture along the Rosebud relies on sub-irrigation. Thus, the water quality is important all 12 months of the year. If the thousands of possible CBM wells discharge as much water as predicted, the level of Rosebud Creek will rise and raise the water table in the sub-irrigated fields, which would also be harmful to agriculture. Alfalfa can be killed by CBM water. Mr. McRae also submitted a written statement.

Janet Rice is not in favor of the proposals. On her land west of Broadus there is no irrigation. CBM water is better than the water in some of her wells. She is concerned that if numeric standards are set too low, she may have to clean up her reservoir, which has a white ring around it, even though it gets rainwater. Industry is needed and re-injection of CBM water should be considered.

John Hamilton is a rancher on the Tongue River. He is a proponent of the proposed rulemaking. This is a special area for agriculture with the longest period of frost-free days and most heat units in Montana. He submitted photographs of crops such as watermelons and cantaloupes. He can get three cuttings of

alfalfa. He boiled down well water and showed the mineral sediment that remains. The point is that ground water in this region is not good water, whereas water from rivers, fed by rain and snow, is good water. Different types of soils are mixed on fields. Standards need to protect clay soils. We need to learn from Butte and Anaconda.

Dena Hoff, Dawson County Resource Council, supports the proposal of the petitioners. The lower Yellowstone needs to be protected from the adverse impacts of CBM development. Reasonable standards should be set at the Wyoming/Montana border that are enforceable and that protect downstream water users. If bad water decreases crop production, incomes will be lower, which will lower land values and the tax base. In addition, there are concerns about lower water quality hurting the paddlefish. She also submitted a letter from Eugene Aby, D.V.M., of Glendive, which supported numeric standards.

Paul Herzog is an irrigator in the Miles City area who favors numeric standards.

Karen Stevenson is a proponent of the proposed rulemaking. Well water high in sodium killed grass and trees at her farm. The community of Miles City is based on agriculture, which needs good water.

Terry Punt of Birney said that irrigators own water rights, which could be damaged by holding reservoirs for CBM waste water. He is a proponent of the proposed rulemaking.

Ted Pyle of the Miles City area is for the proposal of the irrigators.

Wally McRae's family has ranched along the Rosebud since the 1880's. Most ranches along the creek have been in the same family for over 100 years. Sub-irrigation is cheap, efficient, and vulnerable to CBM water. Drought is temporary, but CBM water may upset the delicate balance agriculture relies upon. He favors tough numeric standards.

Margaret Scoles lives in Broadus and ranches near Biddle, and supports the proposal of the irrigators. CBM will harm rivers and agriculture, which are more important than CBM. She is concerned that the discharges from Wyoming will harm Montana and raise costs for farmers who would need to pay for gypsum and extra water needed for leaching. She also submitted a written statement.

Jean Hough of Broadus is a candidate for House District 1 and supports the irrigators' proposal.

Michael Bergstrom is the environmental manager for Fidelity Exploration and Production Company and represents the Montana Coal Bed Natural Gas Alliance, which is an opponent of the proposed rulemaking. The three proposals are too simple an answer to too complex a question. The Alliance proposes to work with narrative standards and have numeric limits in permits applied to specific locations where the discharges would occur. The adoption of numeric standards could have unintended consequences and affect agricultural and municipal dischargers. The Alliance supports the ongoing collaborative process.

Wayne Ransbottom, Marathon Oil Company, opposes the proposals, which will eliminate any opportunity for discharge of water to streams. The scientific data to come up with proper standards is lacking. There are differences to consider in stream water quality, ground water, and coal seam water. Discharge should be an option when there are water management plans with surface owners. Narrative standards can safeguard agricultural users while allowing CBM development. It takes 100 to 200 days to get a permit in Wyoming.

Calvin Rice of Broadus is opposed to the proposed rulemaking. Some CBM water is better than natural Powder River water. CBM water could be used to help maintain flows during drought. Standards that are too strict would hurt flexibility.

Del Dinstel submitted a letter from House District 7 Representative Monica J. Lindeen of Huntley, who supports the irrigators' proposal to protect agriculture.

Don Bailey is a rancher on Rosebud Creek who has been a Rosebud County commissioner and Fish & Game commissioner. Experience with coal mines shows that discharges need to be monitored. He supports the proposed rulemaking.

Charles Gephart is doing a soil survey for T&Y Irrigation District. He explained that EC affects vegetation and SAR affects clay soil. It takes a lot of calcium and magnesium to offset sodium from high SAR water. When SAR reaches 12, clay soil will not absorb water and plants cannot penetrate the soil. By comparison the SAR of CBM water may be in the 40's. He is a proponent of the proposed rulemaking.

Bill Griffin irrigates 500 acres from the Powder River. He supports the irrigators' proposal. The Powder River is already difficult to use for irrigation because of poor quality and unsuitable for some soils. DEQ's first proposal [17-171] has no room for CBM water. DEQ's second proposal [17-172] has standards set at a level that is too high earlier in the year, when agriculture expects good water. When ranchers get good water, they need to use it, to make up for bad water. The numbers in

the irrigators' proposal are high, but nondegradation applies. He believes the Powder River has significant capacity for handling CBM discharges during the non-irrigation season.

Ed Swartz has a ranch near Gillette, Wyoming. Three years ago CBM water was dumped in a creek that runs on his ranch. It killed vegetation along the creek. Mr. Swartz showed the Board photographs of the damage. Montana needs tough numeric standards and cannot rely on Wyoming. When Wyoming allows reservoirs on drainage channels to hold CBM water, normal natural flows to downstream users are stopped. CBM water should be re-injected. Mr. Swartz submitted a letter from Redstone Resources, Inc., which he said shows that CBM developers will try to intimidate you if you do not agree with them.

David Davenport, Rosebud Conservation District, supports the proposal of the irrigators. Levels of EC and SAR should be low during the non-irrigation season to protect sub-irrigation, which goes on all year.

Paul Neiman is on the Rosebud south of Colstrip. He supports the proposal of the irrigators. There should be no harm to Rosebud Creek.

William MacKay is the past chair of the NPRC. He favors the irrigators' proposal. The CBM industry should prove that its water is safe.

Nick Golder uses Rosebud Creek for sub-irrigation. Besides water quality concerns, he is concerned that CBM water discharges would raise water levels and waterlog meadows. He supports the irrigators' proposal. He would consider damage to his land from CBM water to be a taking of his property. He also submitted a written statement.

Sally Hagedorn uses a spreader dike system along Pumpkin Creek. Clean flood water is needed to flush out salts. She is a proponent of the proposed rulemaking. She also submitted a written statement.

Wade Sikorski supports the proposed rulemaking. The benefit of the doubt should be to the irrigators.

Brooks Daley, executive director, Montana Farmers Union, supports numeric standards. Montana has an opportunity to be proactive, not reactive, and protect precious water.

Keith Hall of Miles City is retired. He has hunted in Wyoming on Ed Swartz's land and has seen the damage to the land. He is concerned that CBM water will hurt fish and game. CBM water should be re-injected.

Arleen Boyd from Stillwater County supports the irrigators' standards.

Harold Vosen is a volunteer for Yellowstone River Watch. He has recently taken water samples from the Tongue River. Above Dayton, Wyoming, the EC was in the low 200's. At the Montana border the EC was up to 600. Below the dam the EC was 700 and there were fewer insect larva. CBM water will hurt fishing on the Tongue and Yellowstone and possibly hurt the pallid sturgeon and paddlefish. The Tongue is used for recreation by thousands of people. The CBM water kills sagebrush. For the Tongue River at the Wyoming border he proposed an EC of 700 and an EC of 1000 at the Yellowstone, with similar standards for other watersheds. CBM water with EC over 2500 should be re-injected and the rate of CBM production slowed down. Mr. Vosen also submitted a written statement.

Chris Beebe of Montana Wildlife Federation has concerns for fish and game and the damage to forage used by big game. He supports the irrigators' proposal and an adjusted seasonal discharge plan.

Dennis Getz of Glendive said that the oil and gas business is a boom and bust business, whereas agriculture is more stable. He is a proponent of the proposed rulemaking.

Christina Ostendorf has a ranch on the Powder River and supports the irrigators' proposal.

Kim McRae has a ranch near Forsyth and supports the irrigators' proposal. Numeric standards are like grades on report cards—something definite.

Susan Mongold raises sheep near Miles City. Specialty crops can yield \$10,000 per acre, but require good water. Irrigated land pays ten times the taxes as non-irrigated land. Destruction of irrigated land by bad water would be a huge blow to the community.

Additional Written Statements received at the Miles City Hearing

Stan Taylor of Miles City is a proponent of the proposed rulemaking.

Janet Young of Miles City is a proponent of the proposed rulemaking.

Jay Ochsner of Miles City is a proponent of the proposed rulemaking.

John C. Dewey of Sheridan, Wyoming City is a proponent of the proposed rulemaking.

Mike Blum of Miles City supports the irrigators' proposal.

Clinton W. Clark of Forsyth supports the irrigators' proposal.

Stephen Glunt of Miles City opposes CBM development in eastern Montana and is a proponent of the proposed rulemaking.

Patrick Stoltz, general manager of the Miles City Town and Country Club supports the irrigators' proposal.

Gary Ochsner raises crops south of Miles City using Tongue River irrigation water. He supports the irrigators' proposal. As a matter of basic economics, the costs of CBM development are not reflected in the transaction between the owners of the mineral rights and the developers of CBM. Spillover effects impose costs on third parties downstream. To prevent some of the costs of CBM development from being transferred to irrigators, the present quality of the water must be maintained.

Deborah Hanson of Miles City supports the irrigators' proposal.

William and Judith Musgrave have a ranch along the Tongue River. They support the irrigators' proposal.

Alfred Leatherberry ranches and farms on the Tongue River. He supports the irrigators' proposal.

Judith M. Fahrnow of Miles City is retired. She supports an SAR limit of 1.5 for the Tongue River at Miles City and the prohibition of the surface discharge of saline water.

Conclusion of Hearing at Miles City

At about 4 p.m. Chairman Russell announced that public comments were concluded and that the Board expects to consider whether or not to adopt any of the proposed rules at its public meeting in Helena on December 6, 2002.

Call to Order

Chairman Russell called the public hearing to order at 10:00 a.m. on Friday, September 27, 2002, in Helena.

Attendance

Board Members Present: Chairman Joseph Russell, Susan Kirby Brooke, David Fishbaugh, Kim Lacey, and Russ Hudson

Board Members Absent: Garon Smith, Ward Shanahan

Board Attorney Present: Thomas G. Bowe, Assistant Attorney General, Agency Legal Services Bureau

Board Secretary Present: Joyce Wittenberg

Court Reporter Present: Laurie Crutcher (for Hendrickson's Court Reporting)

Introduction

This was a continuation of the rulemaking hearing on the three proposals for numeric water quality standards for EC and SAR that had been held in Miles City on Thursday. The introductory remarks of Chairman Russell and Assistant Attorney General Tom Bowe were substantially the same as those that they made at Miles City.

Statement by Department of Environmental Quality

Abe Horpestad made a statement similar to the statement he had made at Miles City. In addition, he submitted a document providing the technical basis for DEQ's preferred proposal.

Statement by Environmental Protection Agency

Julie DalSoglio, Water Quality Program Manager in the EPA office in Helena, stated that EPA supports DEQ proposal #1, which is MAR Notice No. 17-171. The protection of assimilative capacity is a function of the TMDL process. She also submitted a written statement.

Statement by Petitioners

Brenda Hall, attorney for Tongue River Water Users Association, disagreed with DEQ's legal opinion about HB 521. There is no comparable federal rule or guideline. Therefore, the petitioners' proposal is not more stringent than a comparable federal rule. Protective standards need to be set upstream, so there is room for development downstream.

Statements by Other Persons

Jeff Barber, Montana Environmental Information Center (MEIC), said that MEIC supports the irrigators' proposal. Narrative standards are not enforceable. There is no federal standard so HB 521 does not apply. Evidence shows that reach-specific standards are necessary. Mr. Barber submitted a memorandum from DEQ in 1996 concluding that no further HB 521 analysis is required where there are no comparable federal regulations.

Stan Frasier, Montana Wildlife Federation, supports the irrigators' proposal. It is better to set standards now than wait for damage to be done.

Tom Schneider of Helena is a petroleum engineer and a proponent of the proposed rulemaking. The quality of CBM water deteriorates as one goes toward the north and west, which is toward Montana from Wyoming. To protect irrigators and protect surface waters, standards should be set. He also thinks that re-injection can be done.

Denise Barber of Helena supports the irrigators' proposal. CBM development will last only 15 to 20 years.

John Dendy of Helena supports the irrigators' proposal. Standards should be set now so we won't need to pay for clean-ups in the future. Agricultural is a sustainable industry. CBM is not.

Verner Bertelsen of Helena is a proponent of the proposed rulemaking. There should not be a sense of urgency because the gas will be there until the industry meets the standards set for removal. He favors strict standards to protect the land and water.

Steve Gilbert of Helena is a biologist. He is familiar with CBM development and with the Tongue River and supports the irrigators' proposal. Strict standards are needed to protect agriculture and aquatic ecosystems.

John Mest of Manhattan, Montana, is a retired physician. He fishes on the Powder and Upper Tongue Rivers. Drought and low stream flows increase the concentration of pollutants. He recommends zero tolerance above the present levels of EC and SAR.

Julia Page is a public member of the EQC. She supports the irrigators' proposal. The standards proposed reflect existing water quality. The effects are well known of high sodium on soil and of salinity on crops. Numeric standards will give industry

certainty and consistency and protect Montana soils and water users. The CBM industry has options other than discharge to surface waters. She also submitted a written statement.

Joseph Icenogle, Montana Coal Bed Natural Gas Alliance, opposes the proposed rulemaking. The members of the Alliance have and will follow the law and operate in an environmentally sound manner. The Alliance has a proposal to protect downstream users of water. About 60% of the mineral rights in the Powder River basin are owned by the federal government. Mr. Icenogle submitted an excerpt of a ruling by United States District Judge Haddon finding that CBM water is not a pollutant and that its discharge in unaltered form does not require a permit. Board Member Hudson asked that the ruling be entered into the record.

David Searle, Marathon Oil Company, opposes the proposed rulemaking. It is possible to protect the environment and water and allow economic development. The collaborative process is underway and is considering a CBM industry proposal. There are 15,000 wells in Wyoming, which uses narrative standards, and water quality has not been degraded. Mr. Searle submitted a Technical Support Document by William Schafer and written comments about proposed numeric standards.

Bruce Williams, Montana Coalbed Natural Gas Alliance, is opposed to the proposed rulemaking. The question is how to protect stream water. The drought has affected water quality. Pipeline capacity limits CBM development. The Alliance wants to use the TMDL process to address assimilative capacity in streams. Numeric standards may have unintended consequences to other users. Through the permitting process, narrative standards can support numeric limitations. CBM water has been valuable to dry land ranches and wildlife. The surface discharge of water is one management tool.

Kevin Harvey said he was speaking in place of Dr. Schafer. He discussed one of the graphs prepared by Dr. Schafer that Mr. Searle had submitted. The graph is entitled, "Yellowstone River fails to meet Proposed Standards in MDEQ Petition." Chairman Russell pointed out that the standards shown on the graph are for tributaries, not the mainstem of the Tongue River. If the EC standard of 1000 for the mainstem of the Tongue River were used, nearly all the exceedances of EC would disappear.

Jon Metropoulos, is an attorney for Fidelity Exploration and Production, which opposes the proposed rulemaking. He agrees with the HB 521 analysis of DEQ. In addition, State numeric standards are more stringent when the federal government has narrative standards. Board Member Shanahan does not have a legal conflict that disqualifies him on this matter.

Karen Rogge, Montana Coalbed Natural Gas Alliance, has a ranch south of Broadus and opposes the proposed rulemaking. The proposed standards for the Powder River are higher than natural levels. Some CBM ponds have better water than the Powder River. The proposed standards are too strict.

Ron Steg is the EPA's TMDL Program Manager for the State of Montana. TMDL is a state responsibility. Many waters in southeast Montana are impaired for salinity. There is a court order requiring that TMDL issues be addressed. The TMDL process requires that numeric targets be established. A standard is a legally enforceable number set to protect uses of water. A target is established through the TMDL process and is intended to support beneficial uses. Point sources must comply with targets.

Jessica Rhoades, NPRC, said that NPRC has worked to help farmers and ranchers.

Conclusion of Hearing at Helena

At about 2:30 p.m. Chairman Russell announced that public comments were concluded and that the Board expects to consider whether or not to adopt any of the proposed rules at its public meeting in Helena on December 6, 2002.

Board of Environmental Review September 26 & 27, 2002, Hearing Minutes Approved:

JAN P. SENSIBAUGH
DIRECTOR
DEPARTMENT OF ENVIRONMENTAL
QUALITY

DATE

JOSEPH W. RUSSELL, M.P.H.
CHAIRMAN
BOARD OF ENVIRONMENTAL
REVIEW

DATE